

00000 7032

Department of Energy

ROCKY FLATS OFFICE
P.O. BOX 928
GOLDEN COLORADO 80402-0928
AUG 18 1992



4396 RF 92

E
DATE

ACTION

DIST.	ENC
BENJAMIN, A	
BERMAN, H.S.	
BRADY, J.A.	
BRANCH, D.B.	
CARNIVAL, G.J.	
COPP, R.D.	
CORDOVA, R.C.	
DAVIS, J.G.	
EVERED, J.E.	
FERRERA, D.W.	
GOODWIN, R.	
HANNI, B.J.	
HEALY, T.J.	
HILBIG, J.G.	
IDEKER, E.H.	
KIRBY, W.A.	
KRIEG, D.	
KUESTER, A.W.	
LEE, E.M.	<input checked="" type="checkbox"/>
MARX, G.E.	
MORGAN, R.V.	
PIZZUTO, V.M.	
POTTER, G.L.	
SANDLIN, N.B.	
SATTERWHITE, D.G.	
SCHUBERT, A.L.	
SHEPLER, R.L.	
SULLIVAN, M.T.	
SWANSON, E.R.	
MAN, K.G.	
INSON, R.B.	
WILSON, J.M.	
ZANE, J.O.	
Burmeister	<input checked="" type="checkbox"/>
Cowdry	<input checked="" type="checkbox"/>

CORRESP CONTROL ☒
TRAFFIC ☒

Reviewed for Addressee
Corresp Control RFP

8-20-92

DATE BY

Li #

Mr Martin Hestmark
U S Environmental Protection Agency Region VIII
ATTN Rocky Flats Project Manager 8HWM RI
999 18th Street, Suite 500 8WM-C
Denver Colorado 80202 2405

Mr Gary Baughman
Hazardous Waste Facilities Unit Leader
Colorado Department of Health
4210 East 11th Avenue
Denver Colorado 80220

Gentlemen

The French Drain on the OUI Interim Remedial Action overflowed on July 22, 1992, for a few hours. The overflow was determined to be caused by a clog in the floor drain sump. The drain was reamed out and that seemed to clear up the problem. Inspection of the floor drain has now been included in the daily inspection of the vault. After discussions with EG&G personnel it is believed that very little of the overflow reached the South Interceptor Ditch and that most of water went right back into the French Drain.

A sample of the overflow was taken for chemical analysis and a copy of the analytical report is attached. Please note that this is a preliminary report and the data has not been validated. The concentrations of trichloroethene and tetrachloroethene were 57 and 96 ppb respectively. These concentrations are slightly above the ARARs of 5 ppb for both compounds. The gross alpha and gross beta activity was below the ARARs.

If you have any questions please contact Paul Singh at 966-7565

Sincerely

James K. Hartman
Assistant Manager
for Environmental Management

Enclosure

cc w/Enclosure
S Grace ERD/RFO
M Burmeister EG&G
C Cowdry EG&G
B Frazier EPA
J Schieffelin CDH

92 DOE 9447

ROCKY FLATS
CORRESP
EG&G
PLAT

AUG 20 10 55 AM '92

EG&G ROCKY FLATS INC
ROCKY FLATS PLANT
P O BOX 464
GOLDEN COLORADO 80402

ANALYTICAL REPORT

GENERAL LABORATORY
BUILDING 881

DISTRIBUTION

C Cowdery Env Mgmt T130B
P Singh DOE 116
J Souttee, 891
File

LAB NUMBER 92E1781 (PRELIMINARY)

DATE August 11 1992

ACCOUNT NO 986445

APPROVED

E A Brovsky
E A Brovsky

SAMPLE DESCRIPTION

881 French Drain
Sample date 07/22/92

ANALYSIS RESULTS

The sample was screened for gross alpha activity by gas proportional counting analyzed for Be by flame AA, and the pH was measured

Gross Alpha < 100 pCi/l

Be < 0.01 μ g

pH 7.6

See attached ICPEs Metals Sweep Report

See attached abbreviated Volatile Organic Analysis Report

See attached Quantitative Gross Alpha/Gross Beta Analysis Report

The sample will be digested and analyzed for ICPEs Metals using USEPA protocols, at which time a final report will be generated

PLASMA SPECTROSCOPY REPORT
PRELIMINARY ICPE S WEEP RESULTS

Lab Number 92E1781
Report Date August 10 1992

SAMPLE DESCRIPTION

One sample 881 French Drain was collected on July 23 1992 for ICPE S sweep analysis of dissolved metals

RESULTS NARRATIVE

A sample was collected on July 22, 1992 and brought in for ICPE S Sweep analysis on July 23, 1992. The sample was clear and colorless, but had a thin organic layer on it. The sample was preserved by storage at 4 C. The sample was analyzed without digestion a process used in routine environmental metals analyses to break down organic matrices and solubilize particulate matter. The organic layer was not sampled or analyzed. The attached results should be evaluated as representative of only the aqueous dissolved portion of the sample. The sample was not analyzed by USEPA procedures.

Results are reported in $\mu\text{g/L}$ on the attached sheets. Only the first two significant figures of each result are valid. Flags and qualifiers are explained below. A duplicate aliquot of the sample was analyzed, as well as a third aliquot which was spiked and analyzed to determine the effect of the sample matrix on the analysis. All quality assurance parameters were within normal control limits.

Data Flags and Qualifiers.

- U The analyte was not detected in the sample
- B The analyte was detected in the sample, but at a low level in between the instrument's detection limit and the required detection limit for environmental water samples

This sample will be digested and analyzed according to USEPA protocols at the earliest convenient time. The raw data for this analysis are stored under 92G0037

Chemist Approval

Laura K Hubbard
Laura K Hubbard

Date August 10, 1992

1
INORGANIC ANALYSIS DATA SHEET

178101

Lab Name GENERAL LABORATORY

Section: 881

Lab Sample ID WELVAULT1

% Solids (0 = N/A) 0 0

X indicates TCLP extract

Date Sampled 07/22/92

SDG No JUL23

Concentration Units UG/L

Analyte	Concentration	C	Q	M
Aluminum	347	-		P
Antimony	16 0	U		P
Arsenic #	64 0	U		P
Barium	214	-		P
Beryllium	1 0	U		P
Cadmium	2 0	U		P
Calcium	105000	-		P
Chromium	9 4	B		P
Cobalt	6 0	U		P
Copper	4 0	U		P
Iron	203	-		P
Lead #	58 0	U		P
Magnesium	22300	-		P
Manganese	5 7	B		P
Molybdenum	11 0	U		P
Nickel	13 0	U		P
Potassium	3760	B		P
Selenium #	49 0	U		P
Silver	4 0	U		P
Sodium	56500	-		P
Strontium	729	-		P
Thallium #	113	U		P
Vanadium	6 0	U		P
Zinc	51 6	-		P

Color Before COLORLESS

Clarity Before CLEAR

Texture

Color After COLORLESS

Clarity After CLEAR

Artifacts

Comment ICPE S WEEP RESULTS FOR INCIDENTAL WATER IDENTIFICATION THE SAMPLE WAS NOT DIGESTED

TCLP extracts are spiked for Sb As Ba Be Cd Cr Pb Ni Se and Tl only
FORM I - IN

7/88

>>> B81 GENERAL LABORATORY <<<
VOLATILE ORGANIC ANALYSIS REPORT

Lab "E" # 92E1781 Customer ID # _____
Analyst _____ Date ____ / ____ / ____
Comments _____

C-CCC S-SPCC R-Surrogate M-Manual Integrate *-Signal Sat J-B D L

All concentrations are in units of PPB (ug/L)

Run name SYO JUL28A08
Run date 29-JUL-92 00 25 27
Rpt date 29-JUL-92 07 03 28 Last edit date
Dil fact 1 00
Library SYO CLPVDAS
Grp flgs ABCDEFGH

Comments
FT00088ITU1

No	QC	Name	Mass	Scan	Time	Pk	Fit	Area	Conc
1S		Bromochloromethane	128	976	16 32	BB	1 00	14070	50 0
2S		1 4-Difluorobenzene	114	1130	18 27	BB	0 88	82865	50 0
3S		Chlorobenzene-d5	117	1593	24 12	BB	1 00	70716	50 0
1T	S	Chloromethane	50	153	6 55		0 00	NOT FOUND	
2T		Bromomethane	94	341	8 92		0 00	NOT FOUND	
3T	C	Vinyl Chloride	62	213	7 30		0 00	NOT FOUND	
4T		Chloroethane	64	383	9 45		0 00	NOT FOUND	
5T		Methylene Chloride	84	730	13 22	BB	0 69	1517	2 2
6T		Acetone	43	602	12 22		0 00	NOT FOUND	
7T		Carbon Disulfide	76	658	12 30		0 35	NOT FOUND	
8T	C	1 1-Dichloroethene	96	579	11 92		0 00	NOT FOUND	
9T	S	1,1-Dichloroethane	63	798	14 68		0 00	NOT FOUND	
10T		1 2-Dichloroethane (to	96	726	13 78		0 00	NOT FOUND	
11T	C	Chloroform	83	941	16 50		0 00	NOT FOUND	
12T		1 2-Dichloroethane	62	1026	17 57		0 00	NOT FOUND	
13T		2-Butanone	43	943	15 90		0 08	NOT FOUND	
14T		1 1 1-Trichloroethane	97	967	16 83		0 00	NOT FOUND	
15T		Carbon Tetrachloride	117	993	17 15		0 00	NOT FOUND	
16T		Bromodichloromethane	83	1201	19 78		0 00	NOT FOUND	
17T	C	1 2-Dichloropropane	63	1158	19 23		0 00	NOT FOUND	

Run name SYO JUL28A08
 Run date 29-JUL-92 00 25 27
 Rpt date 29-JUL-92 07 03 28
 Dil fact 1 00
 Library SYO CLPVDAS
 Grp flgs ABCDEFGH

Last edit date

18T	cis-1 3-Dichloropropen	75	1270	20	65	0 00	NOT FOUND	
19T	Trichloroethene	130	1170	18	77	BB 0 93	3555	5 7
20T	Dibromochloromethane	129	1452	22	95	0 00	NOT FOUND	
21T	1 1 2-Trichloroethane	97	1389	22	15	0 00	NOT FOUND	
22T	Benzene	78	1025	17	55	0 00	NOT FOUND	
23T	trans-1 3-Dichloroprop	75	1358	21	77	0 00	NOT FOUND	
24T S	Bromoform	173	1695	26	02	0 00	NOT FOUND	
25T	4-Methyl-2-Pentanone	43	1358	21	15	0 00	NOT FOUND	
26T	2-Hexanone	43	1426	22	62	0 00	NOT FOUND	
27T	Tetrachloroethene	164	1455	22	37	BB 1 00	4601	9 6
28T S	1 1 2 2-Tetrachloroeth	83	1777	27	05	0 00	NOT FOUND	
29T C	Toluene	92	1321	21	30	0 00	NOT FOUND	
30T S	Chlorobenzene	112	1552	24	22	0 00	NOT FOUND	
31T C	Ethylbenzene	106	1569	24	43	0 00	NOT FOUND	
32T	Styrene	104	1661	25	58	0 00	NOT FOUND	
33T	Xylenes (total)	106	1589	24	68	0 00	NOT FOUND	
34T R	Toluene-d8	98	1357	21	13	BB 0 84	83126	53 6
35T R	Bromofluorobenzene	95	1796	26	68	BB 0 74	45445	54 3
36T R	1 2-Dichloroethane-d4	65	1064	17	43	BB 0 89	26328	56 9

RADIOCHEMISTRY REPORT
GROSS ALPHA/GROSS BETA DETERMINED
BY GAS PROPORTIONAL COUNTING

Lab Number 92E1781
Report Date August 10 1992

Method Summary

The sample was quantitatively analyzed for gross alpha and gross beta activity using gas proportional counting. In this analysis an aliquot of the sample was evaporated onto a counting planchet and the planchet was counted in a thin window low background gas flow proportional counter. The efficiency curves used to correct for the efficiency of the detector and absorption of the alpha and beta particles by the salt residue on the planchet were determined using ^{241}Am for the alpha curve and ^{90}Sr ^{90}Y for the beta curve. The minimum detectable activity (MDA) for this method is a function of detector background, detector efficiency, self absorption of the salt residue on the planchet, size of aliquot analyzed and count time. The MDAs for the analyses are given in the Results section of the report. Where the result is based on the average of two or more counts, the average MDA is reported.

Quality Assurance/Quality Control Summary

The sample was analyzed in duplicate as part of the QC for the analysis. The agreement of the two results were within the expected precision of the method. The average and propagated uncertainties of the two analyses are reported.

A preparation blank is an aliquot of Milli Q water which is prepared with the sample batch in exactly the same manner as the samples. Data from this analysis indicate that the sample was not contaminated during the analysis.

Results

Gross Alpha 8 ± 2 pCi/l (MDA 4)
Gross Beta 6 ± 3 pCi/l (MDA 9)

Chemist Approval K M Hagglund
K M Hagglund

Date 8-10-92